

# User Manual for Model RGB-DC83 Dream-Color Controller













## Three Color RGB LED Controller with RF Remote Control & 12VDC Power Supply

The model RGB-DC83 controller is designed to be used with the SWDC-RGB series Light Strip. Control the sequence mode and speed of 83 different dynamic chasing patterns from the RF Remote Controller or directly on the RGB Controller unit. The Dream-Color systems controls each RGB LED in the strip independently.

I. Specifications:	
Supply voltage: DC 12V	Product size: (L)94 X (W)59 X (H)26 mm
Maximum Drive Capacity: 510 LEDs (255 IC)	Net weight: 185g
Output: Two SPI Signals	Working Temperature: -20~60°C
Static power consumption: 2.2 Watt	

## II. Controller Button Functions:

Symbol		Action
Remote Control	Controller Unit	
		Power unit ON and OFF – Controller settings retained when powered off  The LCD will Display IC Number when off - each IC controls two RGB LEDs (see +/- description below)  Power must be off for +/- buttons to work
		Play/pause button, Pause to create Static colors, play to start dynamic chasing pattern
	 	Increase and Decrease IC Number - sets number of LEDs in chase pattern (one IC = 2 RGB LEDs)  Example: Set IC Number 80 for model SWDC-RGB160 Light Strip (80 ICs = 160 RGB LEDs)  Power must be off for +/- buttons to work  Note: Can be set higher or lower than actual number of LEDs in system for different effects
		Select Next and Previous programs – 83 programs total
		Increases and Decreases dynamic chase patterns speeds – 100 total steps

## III. Safety Information:

- 1. VERY IMPORTANT: Supply voltage for Controller is 12 Volts DC, do not exceed – Supply voltage for SWDC-RGB series Light Strips is 5 Volts DC – 12 Volts will destroy the LED Strip.**
2. Shorting output wires may cause damage to controller
3. Always observe proper polarity when connecting power and load
4. For indoor use only – this product is not waterproof or weatherproof

## IV. Program Modes Table:

PROGRAM	MODE DESCRIPTION	PROGRAM	MODE DESCRIPTION
1	All color wave forward direction	43	Change color red-purple-red center in
2	All color wave backward direction	44	Change color red-yellow-red forward direction
3	All color center out wave	45	Change color red-yellow-red backward direction
4	All color center in wave	46	Change color red-yellow-red center out
5	Three color forward direction wave	47	Change color red-yellow-red center in
6	Three color backward direction wave	48	Change color red-green-red forward direction
7	Three color center out wave	49	Change color red-green-red backward direction
8	Three color center in wave	50	Change color red-green-red center out
9	Many color wave forward direction	51	Change color red-green-red center in
10	Many color wave backward direction	52	Change color red-blue-red forward direction
11	Many color wave center out	53	Change color red-blue-red backward direction
12	Many color wave center in	54	Change color red-blue-red center out
13	Six color trail forward direction	55	Change color red-blue-red center in
14	Six color trail backward direction	56	Change color green-cyan-green forward direction
15	Six color trail center out	57	Change color green-cyan-green backward direction
16	Six color trail center in	58	Change color green-cyan-green center out
17	Three base color trail forward direction	59	Change color green-cyan-green center in
18	Three base color trail backward direction	60	Change color green-blue-green forward direction
19	Three base color trail center out	61	Change color green-blue-green backward direction
20	Three base color trail center in	62	Change color green-blue-green center out
21	Six color instant change	63	Change color green-blue-green center in
22	Three base color instant change	64	Change color red-white-red forward direction
23	Three mixing color instant change	65	Change color red-white-red backward direction
24	Six color instant change forward direction	66	Change color red-white-red center out
25	Six color instant change backward direction	67	Change color red-white-red center in
26	Six color instant change center out	68	Change color green-white-green forward direction
27	Six color instant change center in	69	Change color green-white-green backward direction
28	Three base color instant change forward direction	70	Change color green-white-green center out
29	Three base color instant change backward direction	71	Change color green-white-green center in
30	Three base color instant change center out	72	Change color blue-white-blue forward direction
31	Three base color instant change center in	73	Change color blue-white-blue backward direction
32	Six color sequence forward direction	74	Change color blue-white-blue center out
33	Six color sequence backward direction	75	Change color blue-white-blue center in
34	Three base color sequence forward direction	76	Six color fade in and fade out forward direction
35	Three base color sequence backward direction	77	Six color fade in and fade out backward direction
36	Six color sequence center out	78	Six color fade in and fade out center out
37	Six color sequence center in	79	Six color fade in and fade out center in
38	Three base color sequence center out	80	Three color fade in and fade out forward direction
39	Three base color sequence center in	81	Three color fade in and fade out backward direction
40	Change color red-purple-red forward direction	82	Three base color fade in and fade out center out
41	Change color red-purple-red backward direction	83	Three base color fade in and fade out center in
42	Change color red-purple-red center out		

## V. Typical Wiring Schematic:

